Report Date: 15 Apr 2015

Summary Report for Individual Task
052-247-1333
Operate a Self-Contained Compressed Air Respirator
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD5 - This product/publication has been reviewed by the product developers in coordination with the MSCOE/FT Leonard Wood MO foreign disclosure authority. This product is releasable to students from all requesting foreign countries without restrictions.

Condition: You are a member of an Urban Search and Rescue (US&R) team given a confined space rescue incident, self contained compressed air respirator with escape pack, and required personal protective equipment. This task should not be trained in MOPP 4.

Standard: Operate a self-contained compressed air respirator ensuring the respirator system is correctly donned and activated, controlled breathing techniques are used, emergency procedures are enacted if the respirator fails, all low-air warnings are recognized and all hazardous areas are exited prior to air depletion.

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: None

DANGER

None

WARNING

None

CAUTION

None

Remarks: All required references and technical manuals will be provided by the local US&R Command.

Notes: None

Performance Steps

1. Perform a pre operational check.

a. Check the content gauge of the cylinder assembly to ensure the cylinder is fully pressurized.

Note: The pressure pointer indicator must be inside the ‘Green’ segment of the gauge face.

b. Connect the female coupling from the hose of the independent air supply to the male coupling of the airline manifold connection.

Note: The maximum working length (300 feet) of the airline hose must not be made up of more than 12 individual hose lengths at 25 foot each.

c. Press the reset button of the Lung Demand Regulator (LDR) to switch ‘Off’ positive pressure.

d. Open the valve of the independent air supply by operating the supplied air respirator system. (See task 052-247-1217)

2. Don the air pack.

Figure 052-247-1333-1
Front of Air Pack

Figure 052-247-1333-2
Back of Air Pack

a. Extend the shoulder strap.

b. Open the buckle of the waist belt and extend the strap at the male buckle end of the strap leaving the female buckle end in position.

c. Place the left arm through the shoulder harness while supporting the face piece.

d. Place the harness over the head and onto the right shoulder, positioning the strap diagonally across the body with the cylinder/carrying holster positioned against the left hip.

e. Loop the waist belt around the waist and fasten the buckle.

f. Grip the cylinder valve with the left hand and lift until the waist belt is in line with the waist.

g. Pull the running end of the waist belt strap until the equipment is secure and comfortable on the waist.

h. Pull down and adjust the shoulder strap.

3. Don the face piece.

CAUTION

Facial hair, beard stubble, side-whiskers, and the wearing of spectacles will adversely affect and interfere with face piece seal. Correct fit of the face piece is only ensured if face piece seal makes close contact with skin.

a. Detach the neck strap stud from the center strap of the head harness.

b. Spread the head harness and drop the head forward and place chin into the chin cup of the face piece.

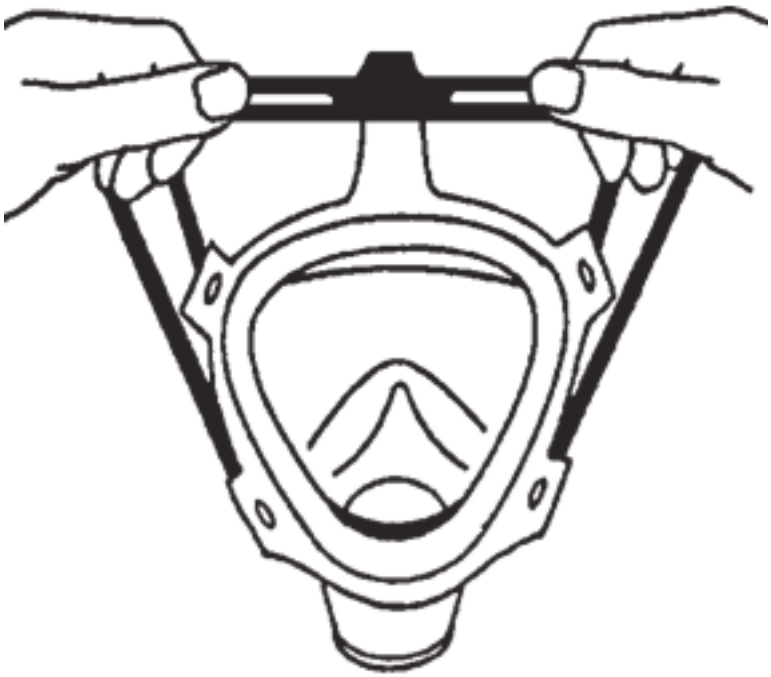

Figure 052-247-1333-3
Don the Face Piece

c. Position the head harness over the head and aligning the harness center pad with back of the head.

d. Tighten both the lower (1) then the upper straps (2) evenly towards back of the head and if necessary, tighten the center strap (3).

Figure 052-247-1333-4
Tighten the Straps

4. Perform a function check.

a. Turn off the independent air supply.

b. Breathe normally to vent the system of air.
Note: When vented, the face piece should hold onto the face indicating a positive seal.

c. Turn on the independent air supply.

d. Inhale and hold breath ensuring there are no audible leaks.

e. Continue breathing normally ensuring the expired air flows easily out of the exhalation valve.

f. Press the red purge button of the LDR to check for additional airflow, then release the button.

g. Continue breathing and proceed to the working area.

WARNING

When using the escape cylinder an audible whistle will sound when the cylinder contents falls below 72.5 PSI (Pounds per Square Inch).

The audible alarm will stop sounding when air pressure has been restored or the cylinder contents falls below 25 PSI (not enough air pressure to activate the alarm).

CAUTION

Do not remove equipment until you are in safe area, clear of atmospheric hazard.

The escape duration starts from the time of opening the cylinder valve and disconnecting the independent air supply. The time required to allow the wearer to escape to a safe area must be within the capacity (volume) of the cylinder selected taking into account the breathing rate of the wearer.

5. Operate the escape cylinder. (If the independent air supply is interrupted)

a. Use the detachable Drop-Down Cylinder Carrying Holster. (if required)

Note: Supported by the wearer and a hanging strap the detached assembly can now be manipulated to facilitate ease of movement in a confined space.

(1) Grip and support the cylinder valve with the left hand.

(2) Open the locking mechanism by pressing and holding the "red" button with the right hand.

Figure 052-247-1333-5
Red Button

(3) Lift and unhitch the cylinder from the bandolier harness and release the "red" button.

b. Open the cylinder valve (counter clockwise) slowly, all the way and breathe normally.

c. Disconnect the female coupling of the hose from the independent air supply from the male coupling of the airline manifold connection.

d. Breathe normally and immediately leave the hazardous area by the shortest and safest escape route.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the Soldier GO if all measures are passed (P). Score the Soldier NO-GO if any measures are failed (F). If the student fails any measure, show them how to do it correctly.

Evaluation Preparation: Setup: Provide the Soldier with all the items listed in the conditions.
Brief the Soldier: Tell the Soldier to operate a self-contained compressed air respirator for an Urban Search and Rescue incident.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Performed a pre operational check.			
2. Donned the air pack.			
3. Donned the face piece.			
4. Performed a function check.			
5. Operated the escape cylinder. (If the independent air supply is interrupted)			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	29 CFR 1910.146	Permit Required-Confined Spaces	No	No
	NFPA 1006	Standard for Rescue Technician Professional Qualifications	Yes	Yes

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks :

Task Number	Title	Proponent	Status
052-247-1217	Operate a Supplied Air Respirator System	052 - Engineer (Individual)	Approved

Supported Individual Tasks : None

Supported Collective Tasks : None